



FIG. 1

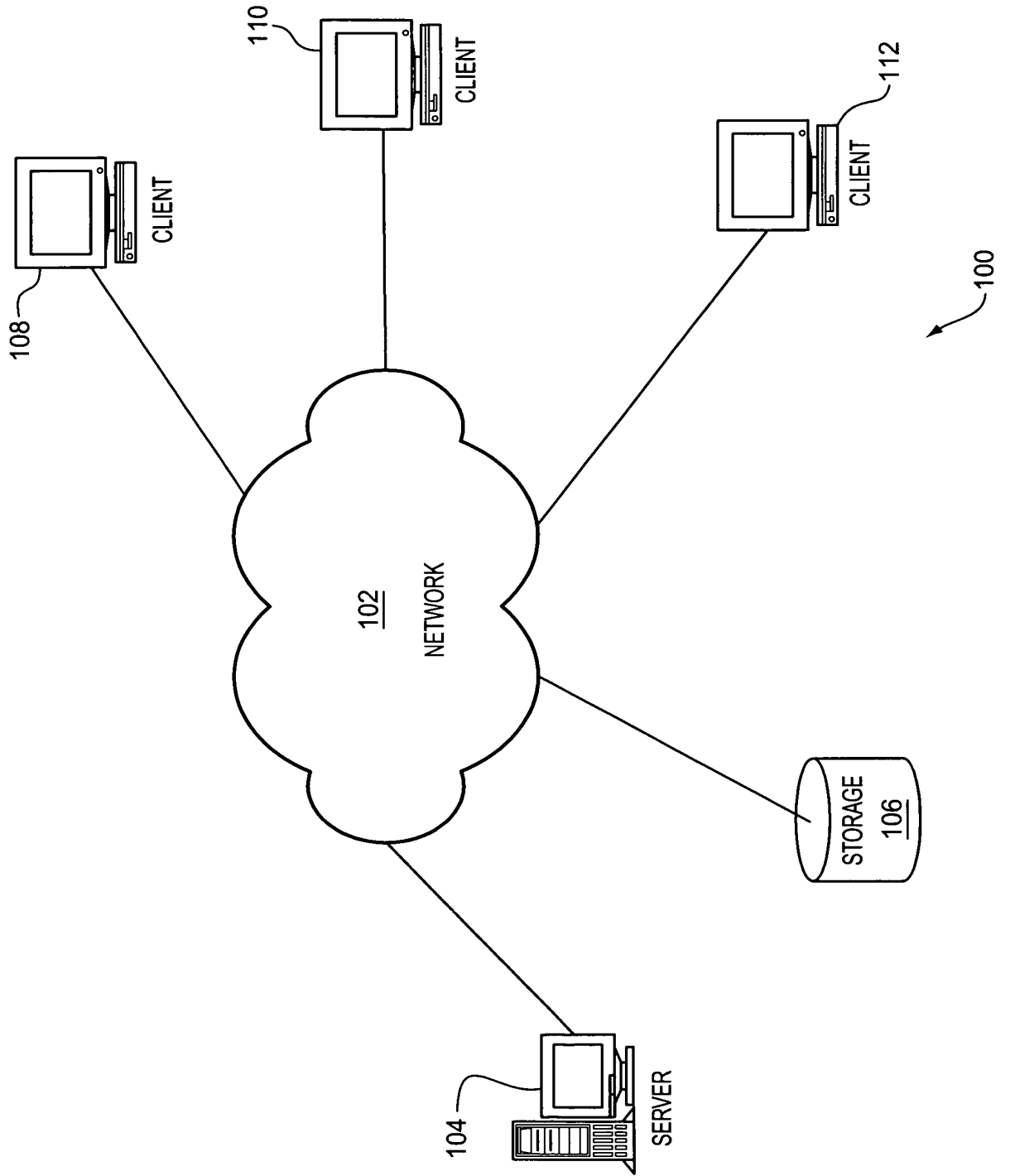




FIG. 2

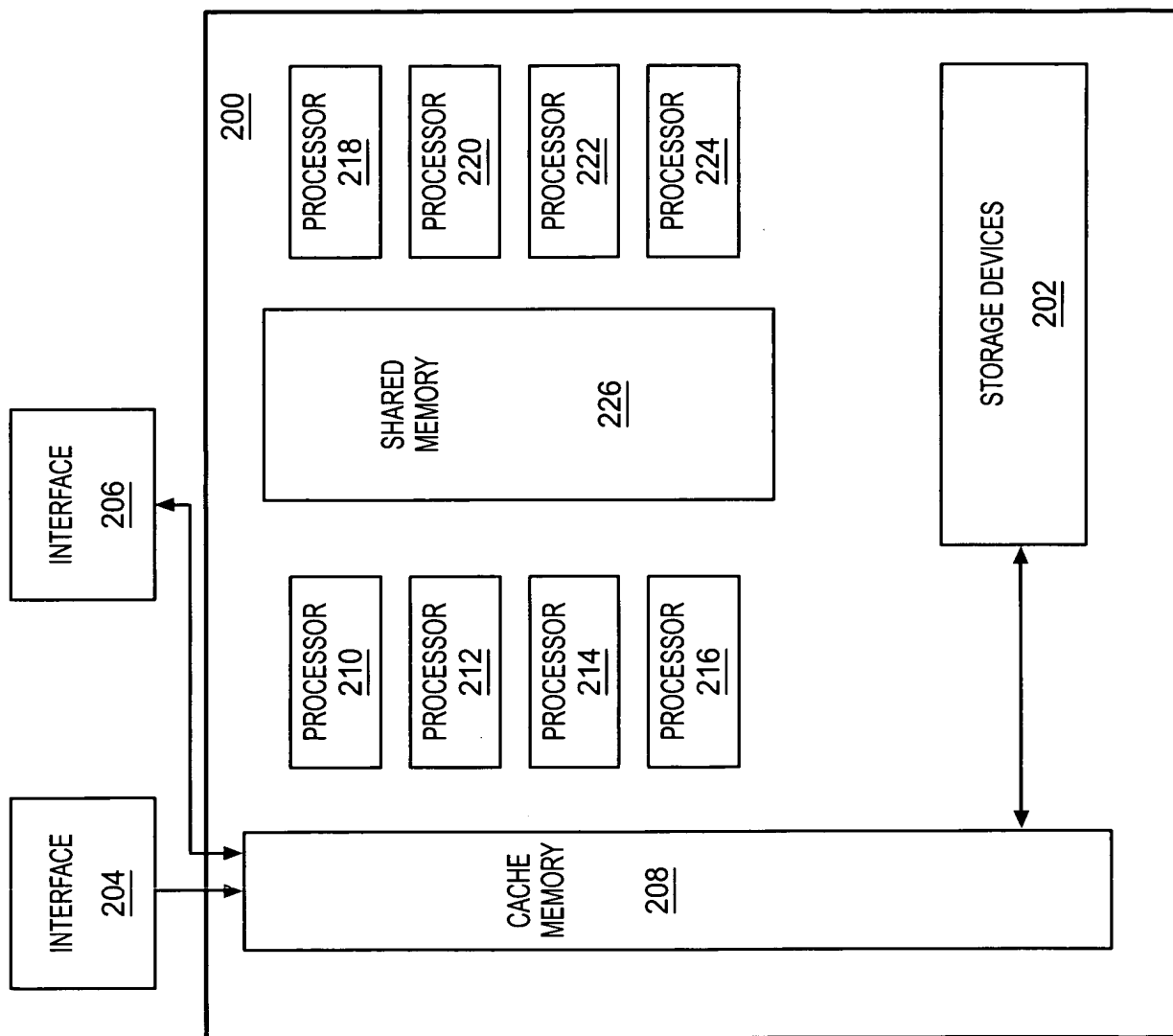




FIG. 3

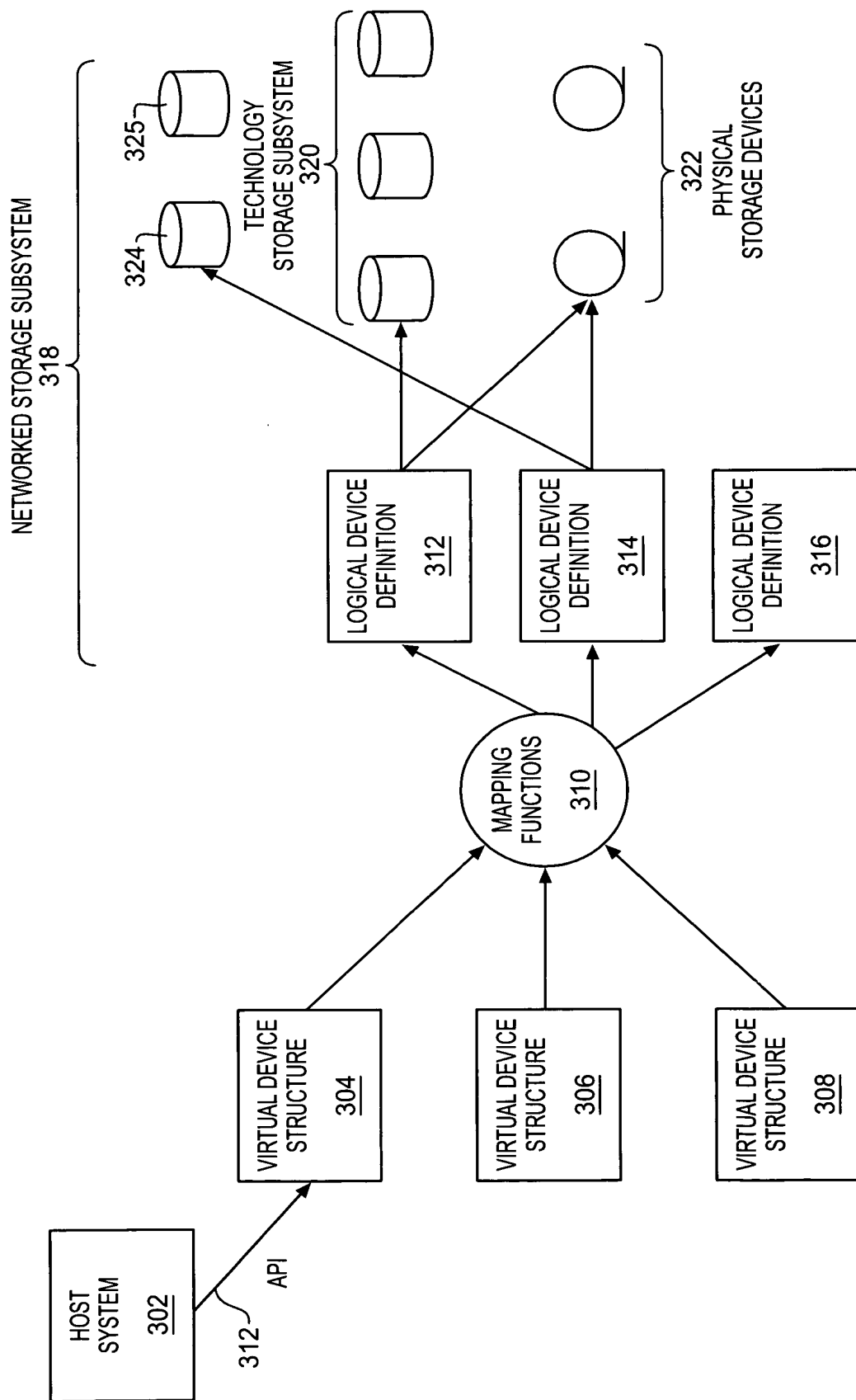


FIG. 4

402

RAID STRIPE GROUP A

DATA - RECORDS n_j THROUGH n_k ; RECORDS n_{y+1} THROUGH n_z

404

RAID STRIPE GROUP B

DATA - RECORDS n_{k+1} THROUGH n_x ; RECORDS ...

406

RAID STRIPE GROUP C

DATA - RECORDS n_{x+1} THROUGH n_y ; RECORDS ...



FIG. 5

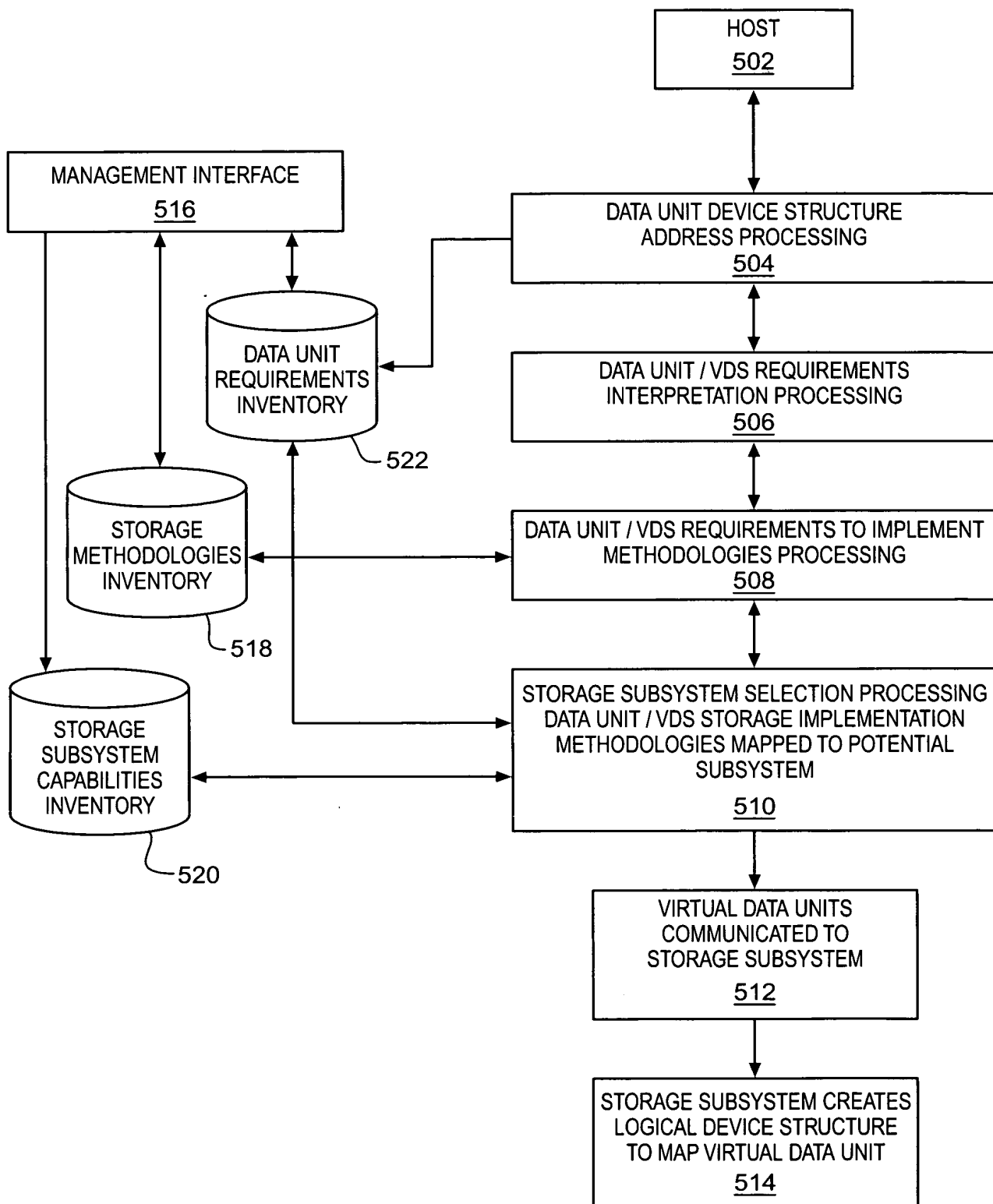


FIG. 6

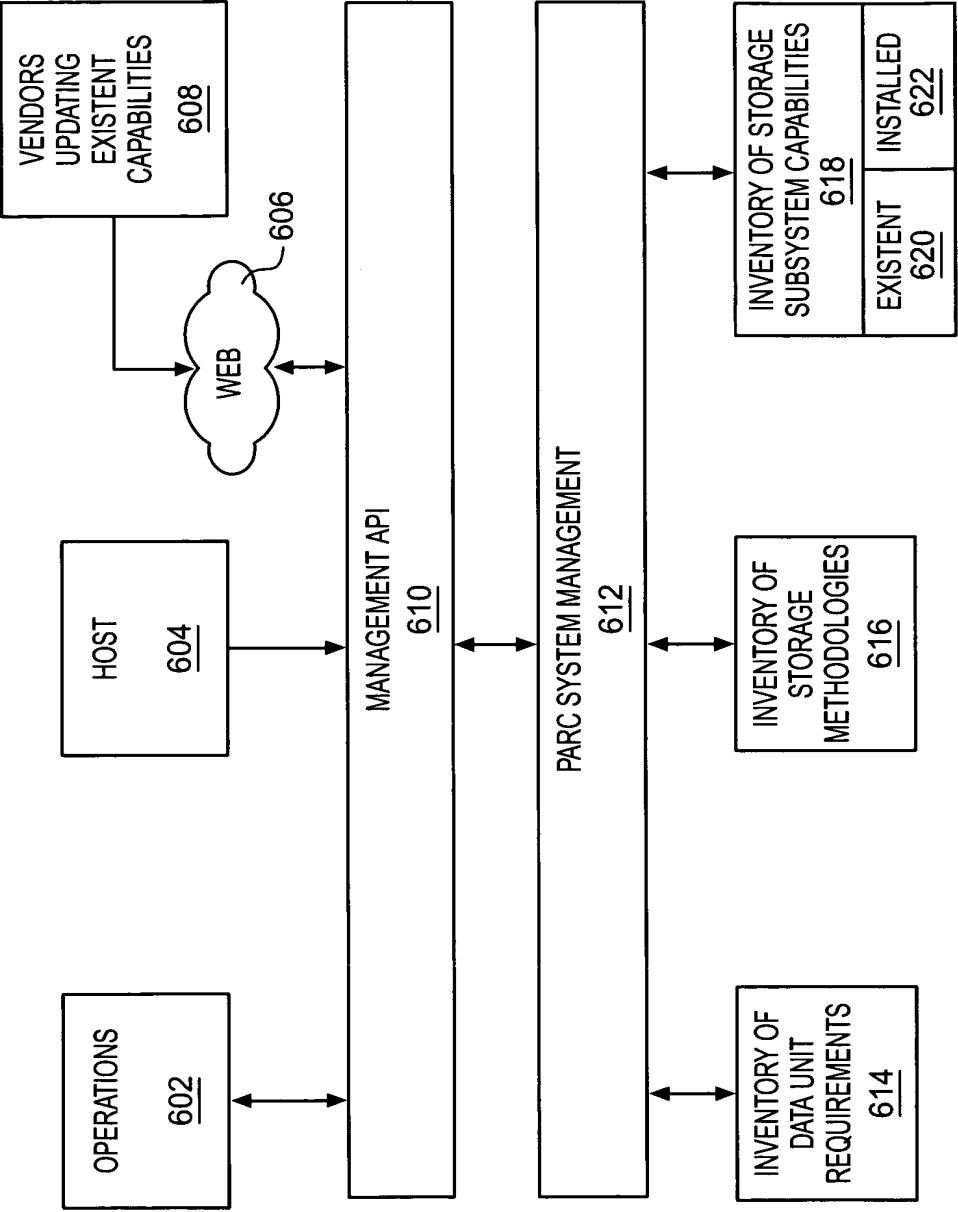
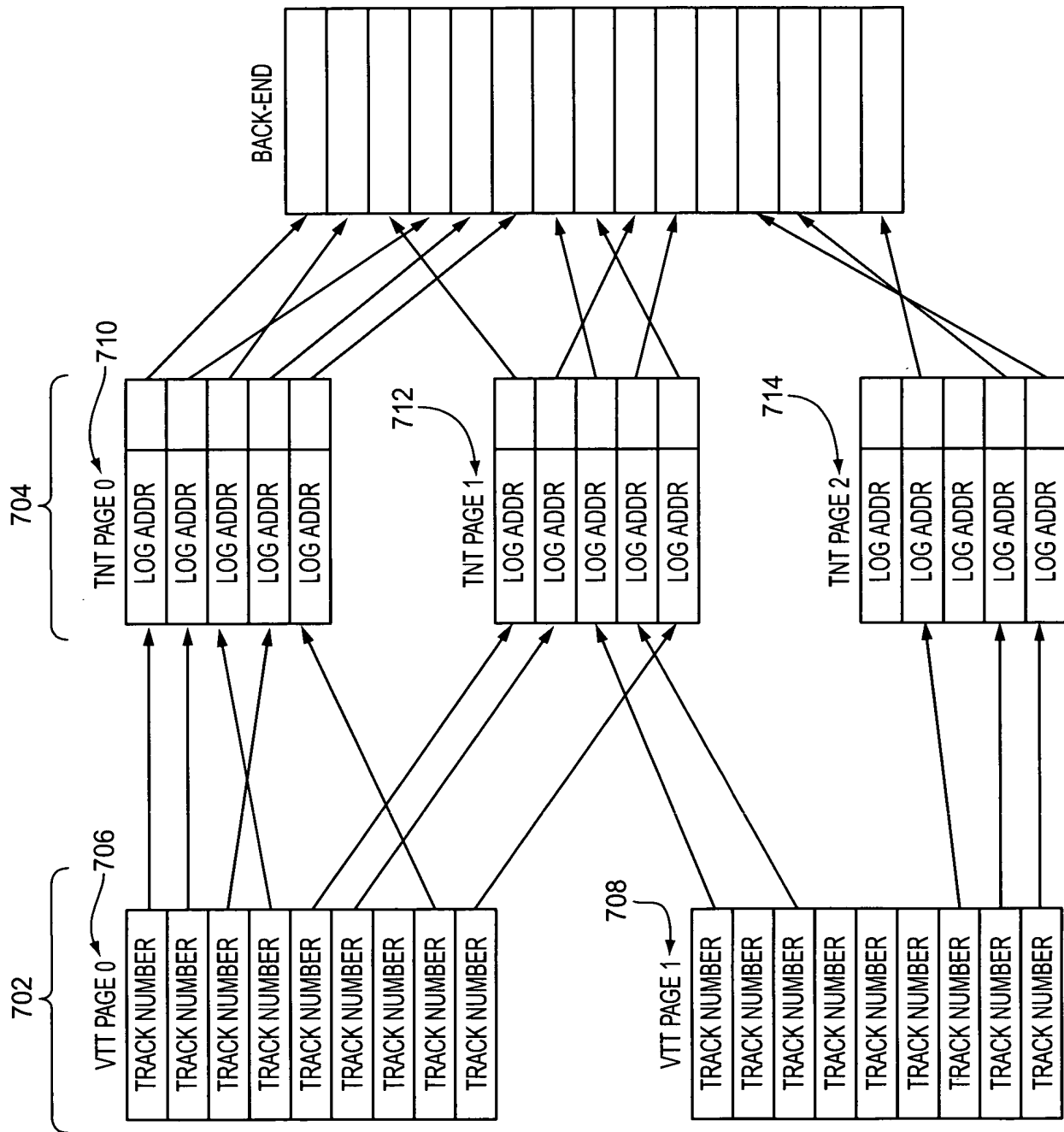


FIG. 7



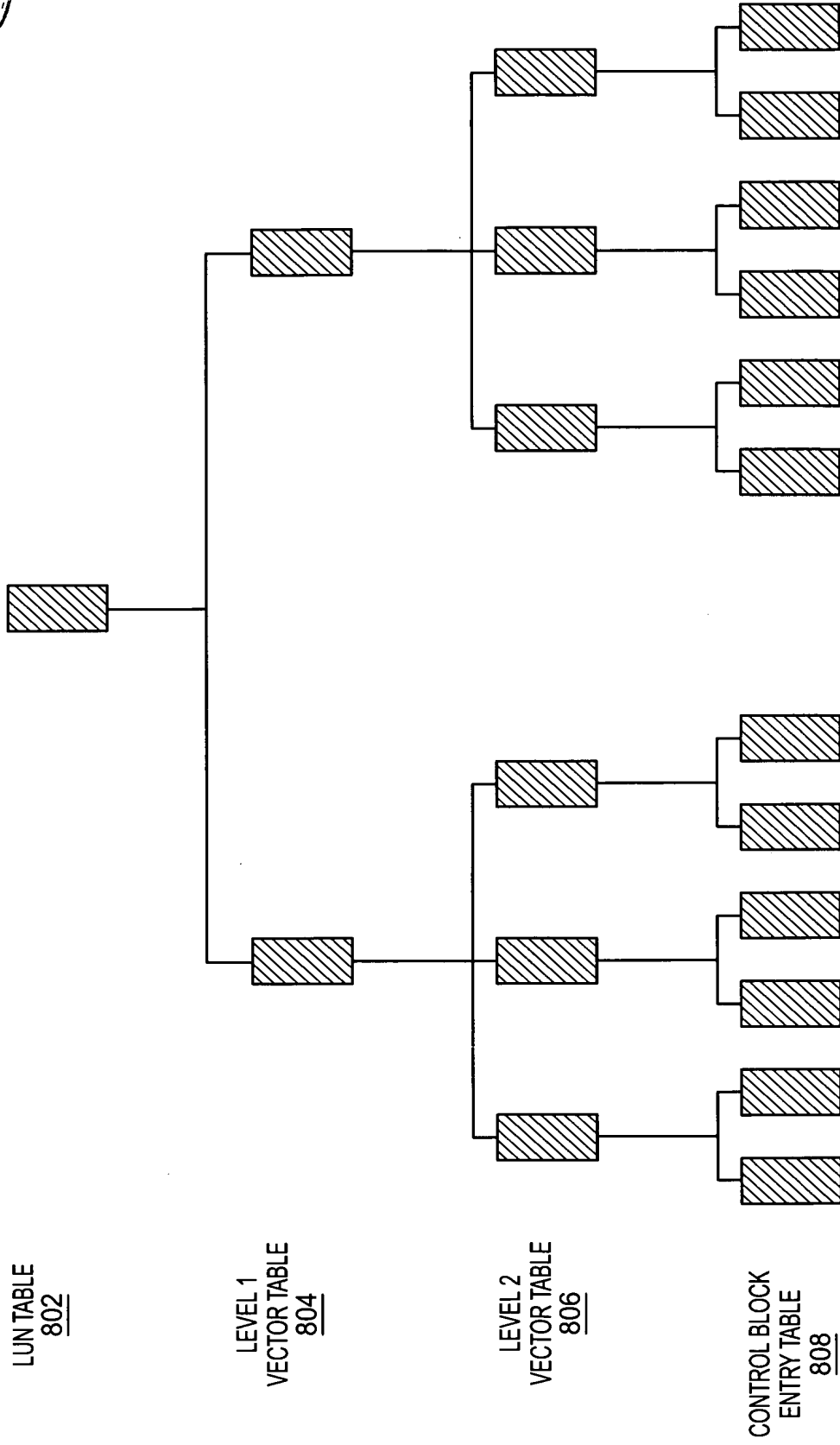


FIG. 8

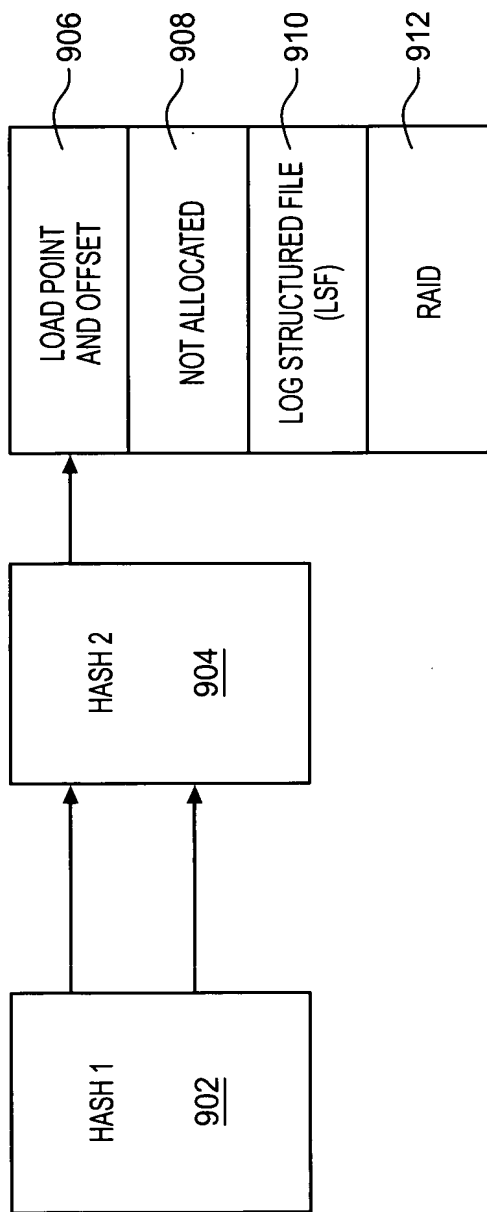


FIG. 9

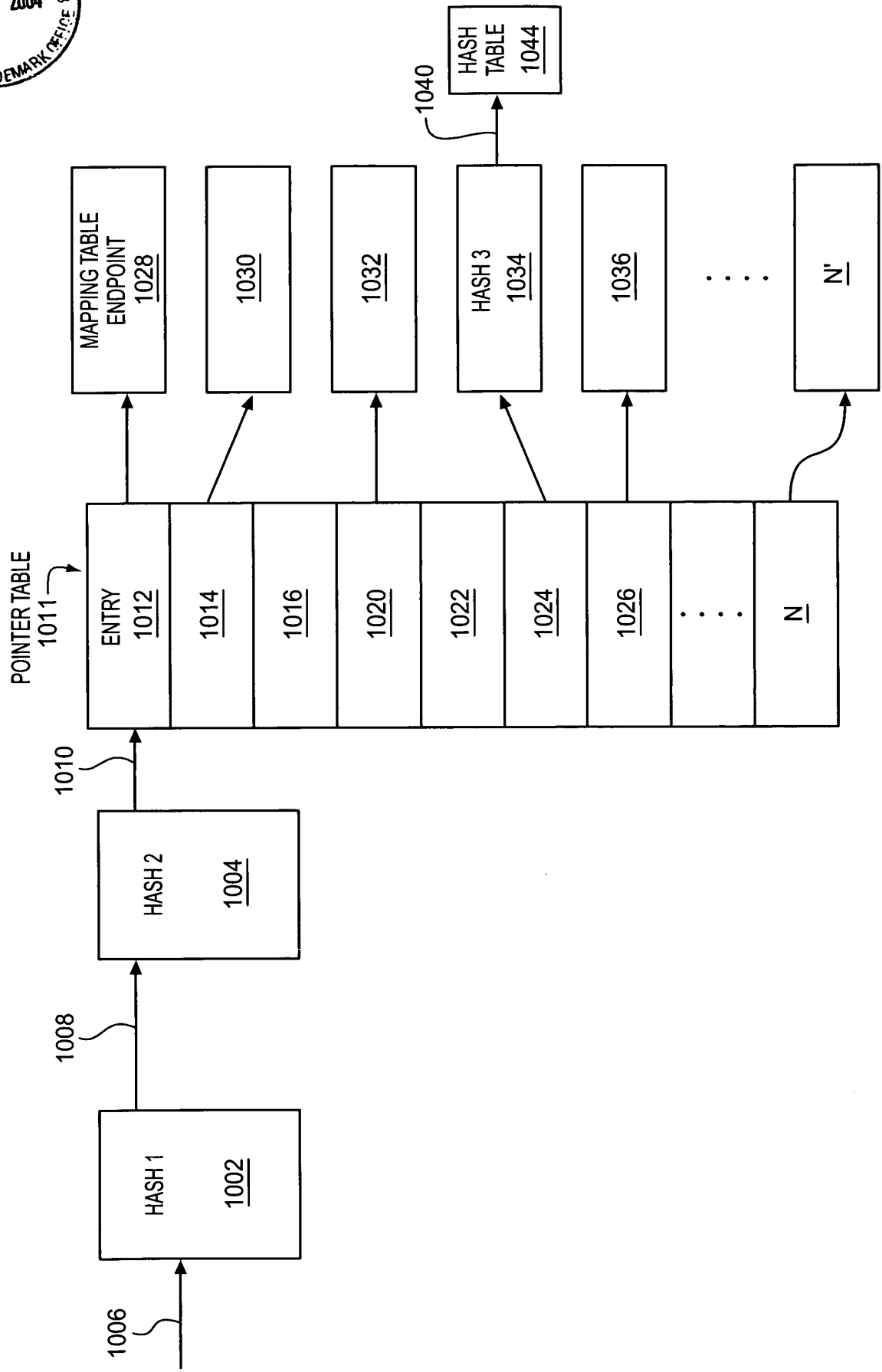


FIG. 10

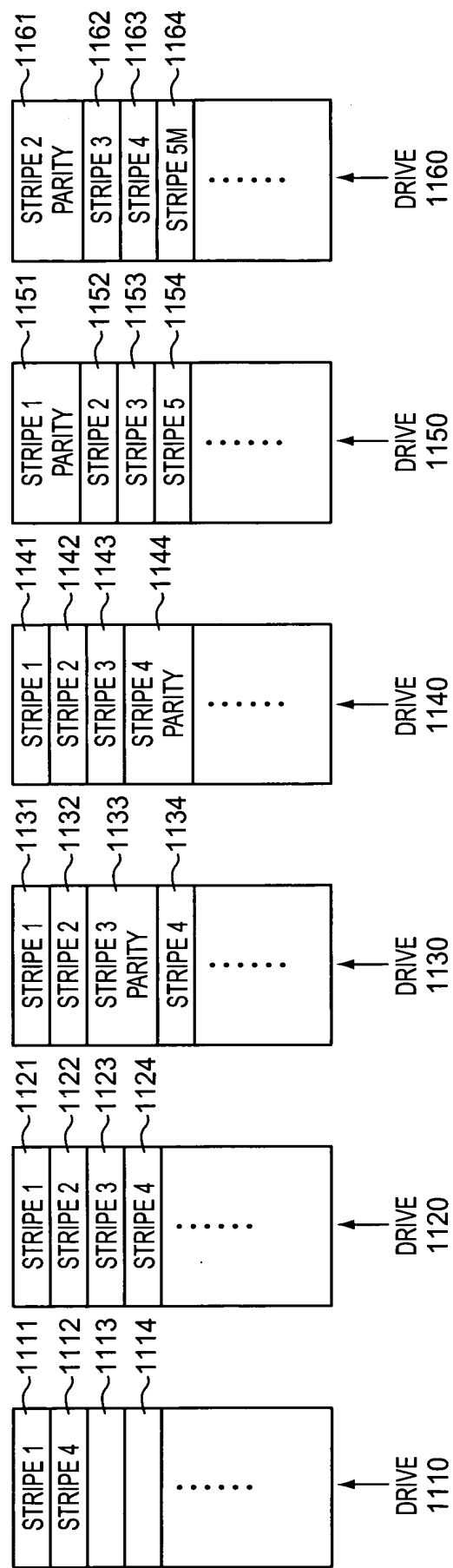


FIG. 11

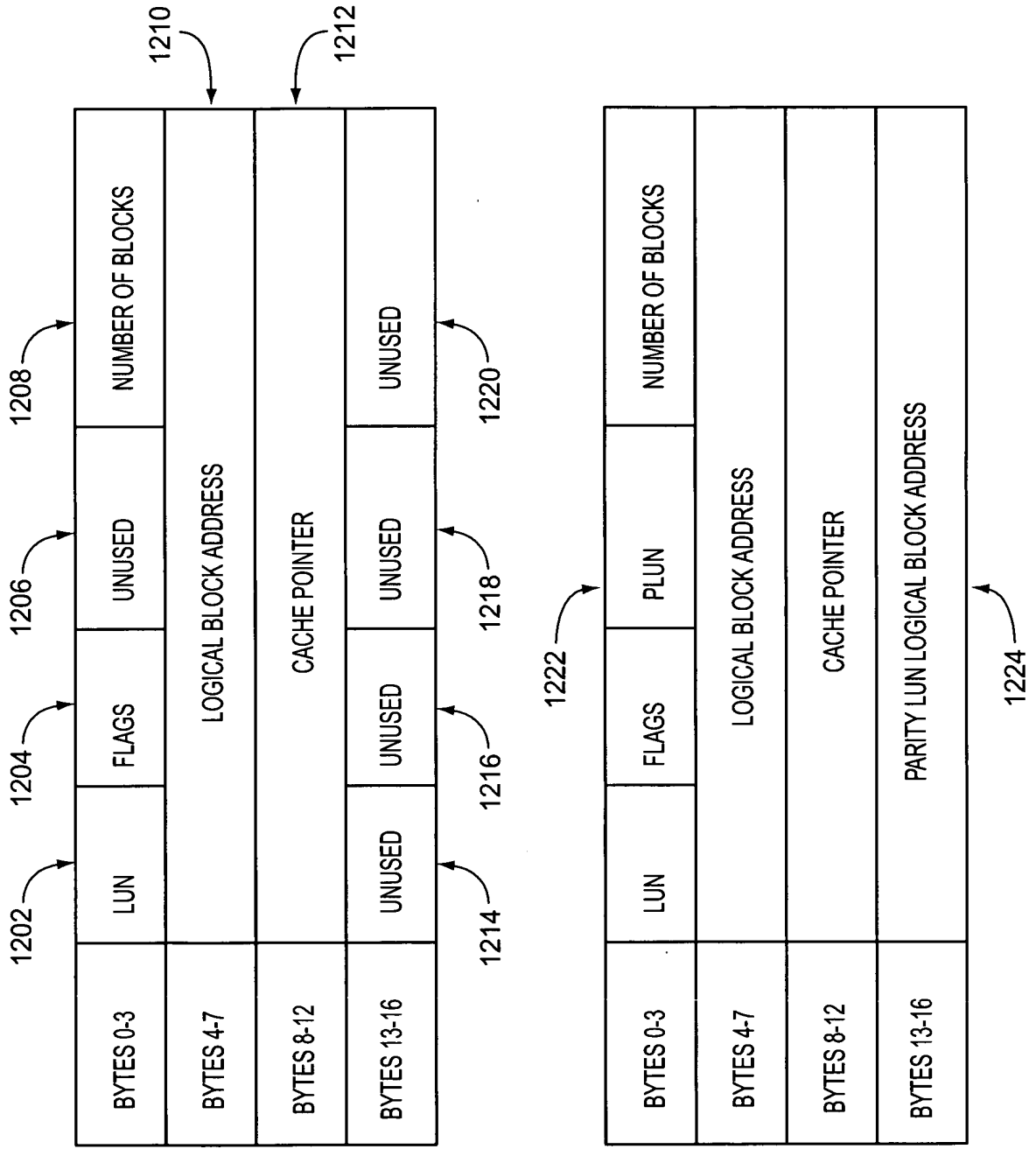


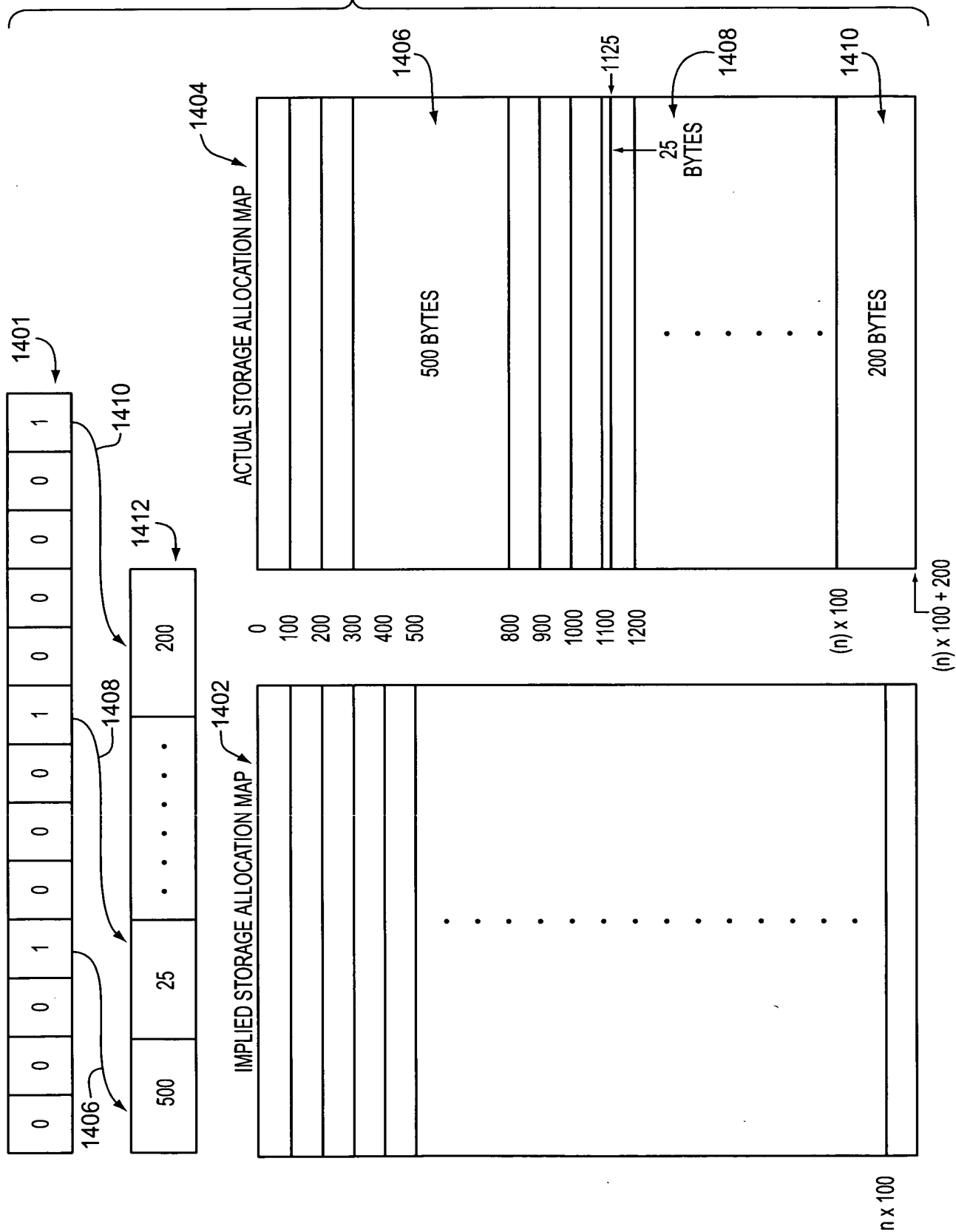
FIG. 12



FIG. 13

TIMESTAMP				
LBA OF PREVIOUS STRIPE				
PREVIOUS STRIPE LUN	INDEX OF PARITY DRIVE	RAID TYPE OF STRIPE	# OF STRIPS IN STRIP	
STRIP SIZE IN BLOCKS				
1st LUN IN STRIPE	ACTIVE COUNT	# OF HOST PIECES IN STRIP	UNUSED	
LBA OF DATA ON 1st LUN				
2nd LUN IN STRIPE	ACTIVE COUNT	# OF HOST PIECES IN STRIP	UNUSED	
LBA OF DATA ON 2nd LUN				
Nth LUN IN STRIPE	ACTIVE COUNT	# OF HOST PIECES IN STRIP	UNUSED	
LBA OF DATA ON Nth LUN				
HOST LUN	LENGTH IN STRIP	HOST LENGTH		
HOST LBA				
HOST LUN	LENGTH IN STRIP	HOST LENGTH		
HOST LBA				

FIG. 14



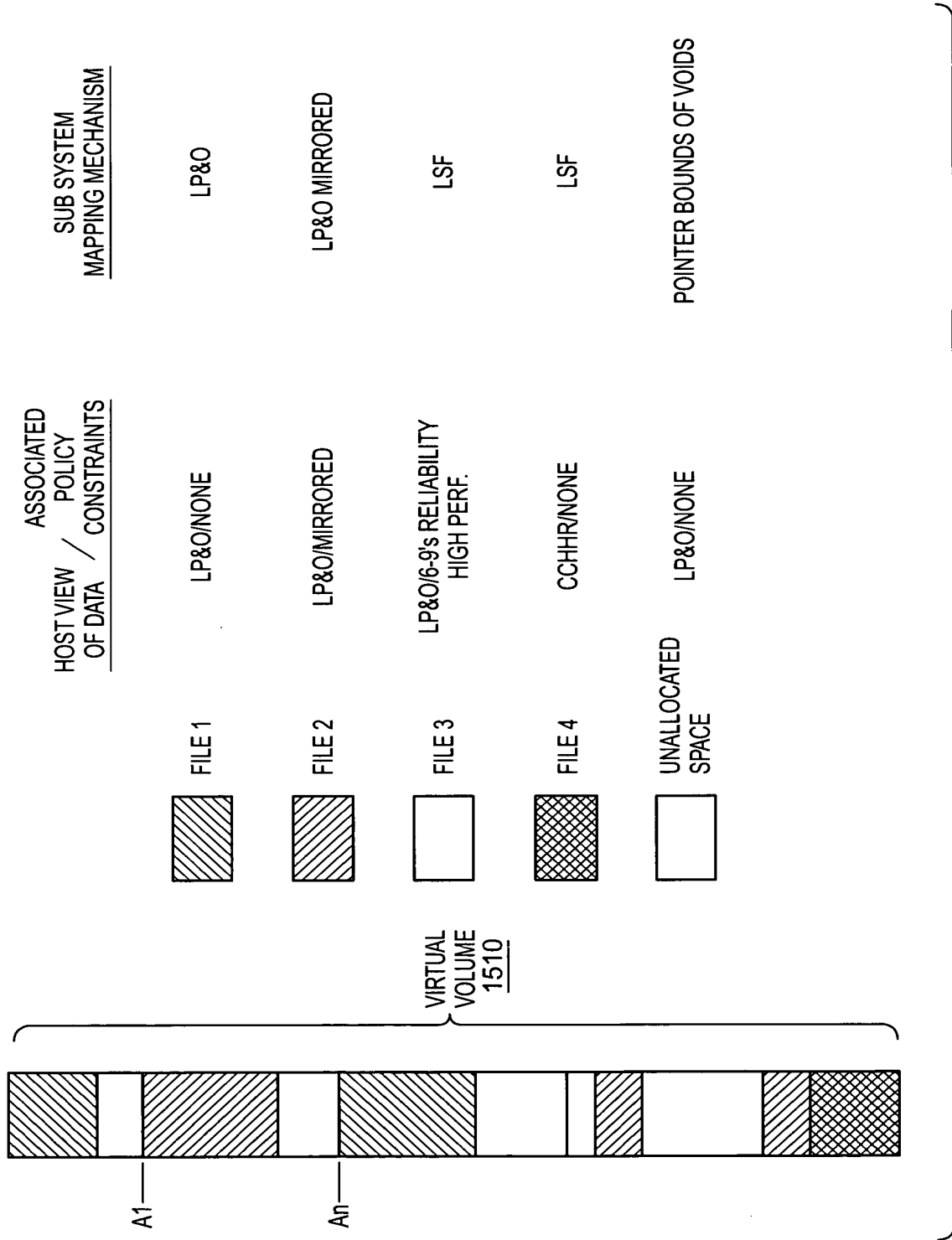
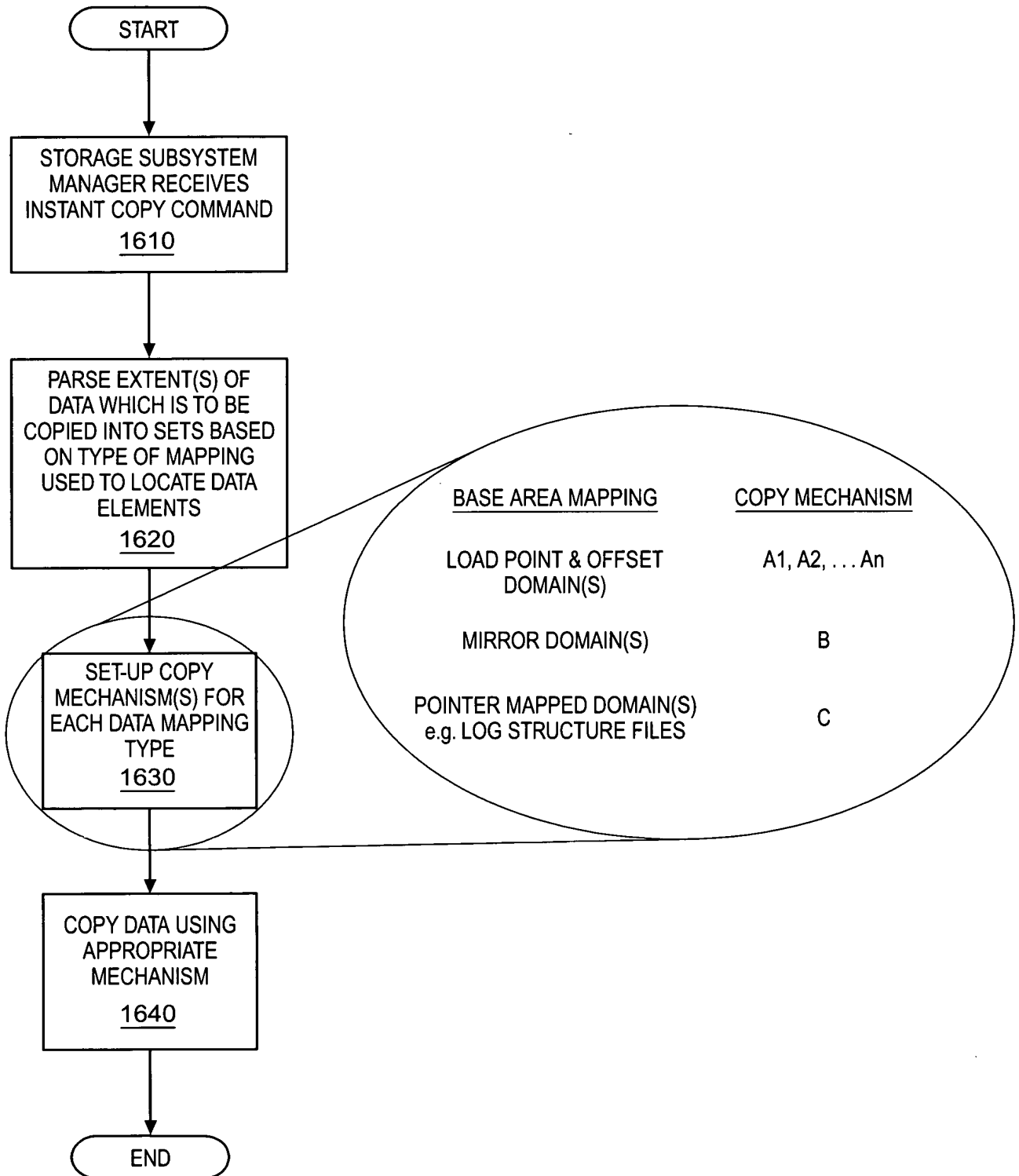


FIG. 15



FIG. 16





ORIGINAL MAPPING

INSTANT COPY META-DATA TYPE

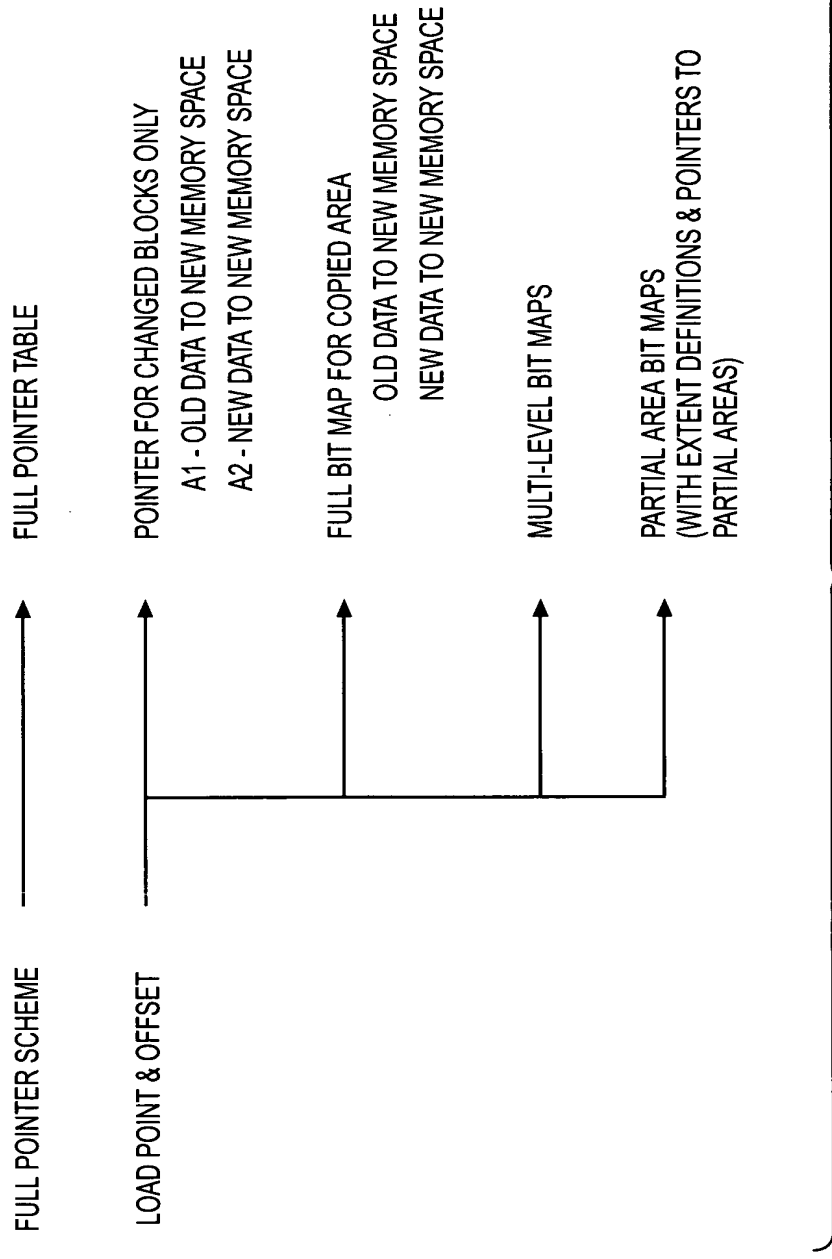


FIG. 17

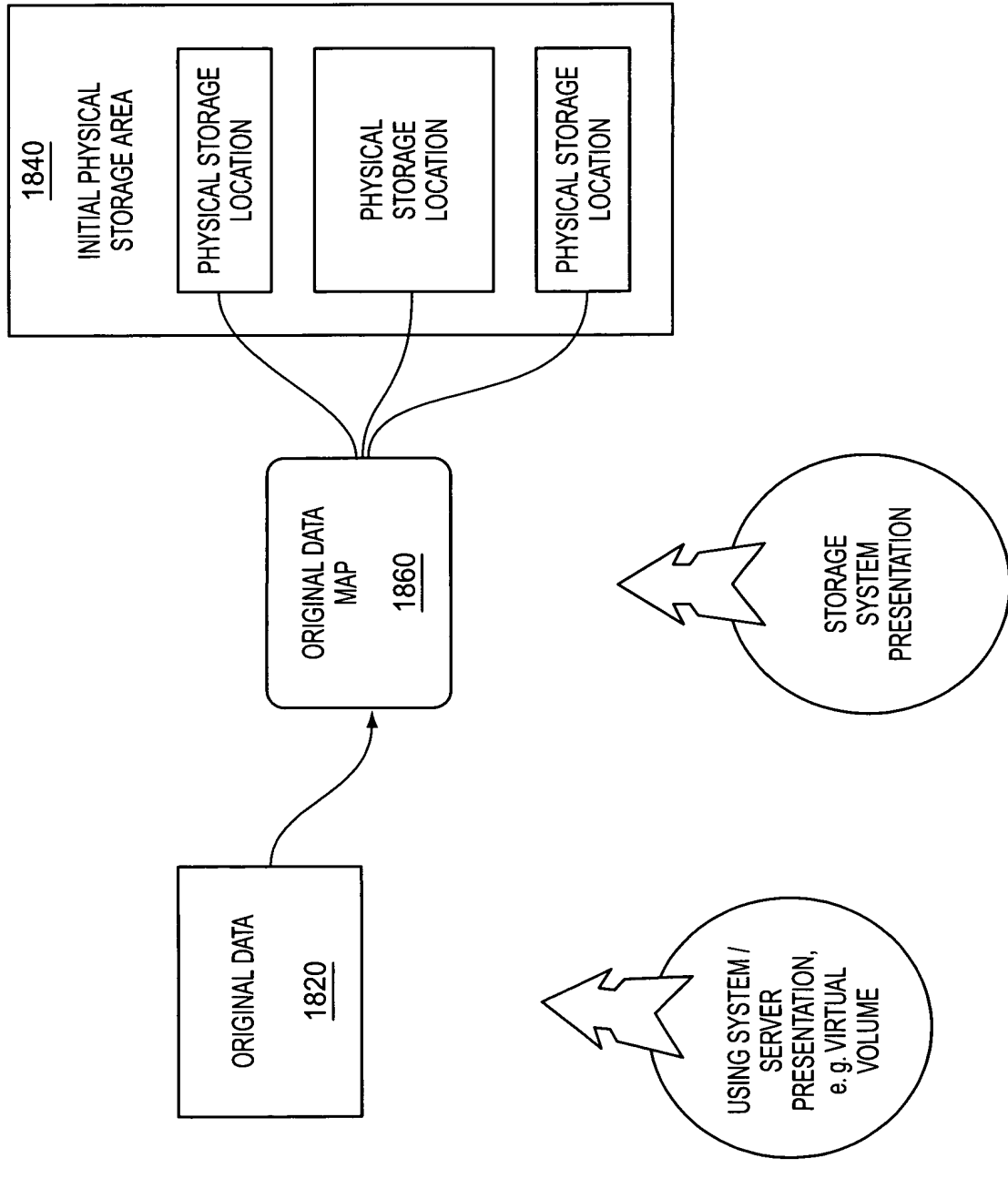


FIG. 18A

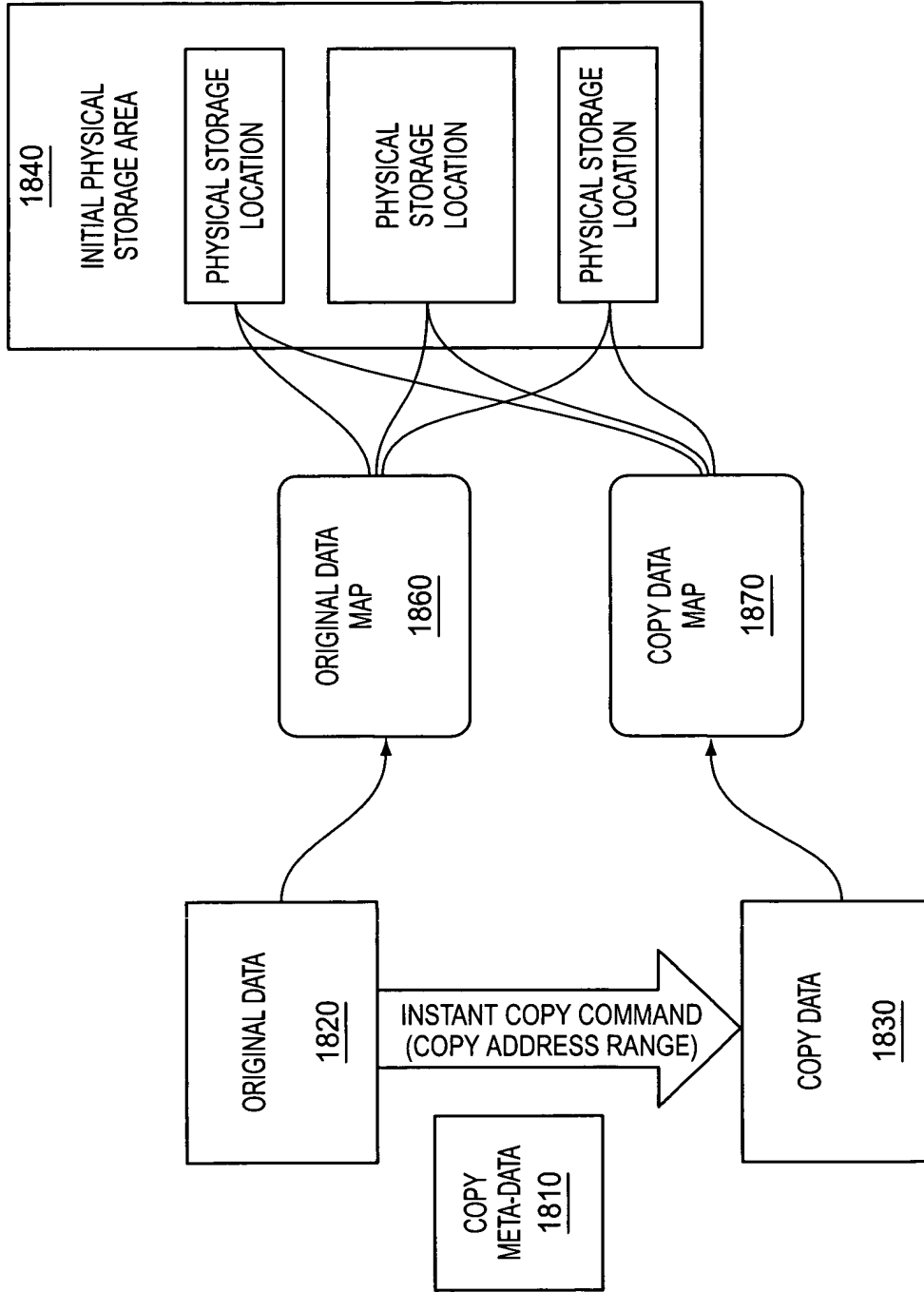


FIG. 18B
PRIOR ART

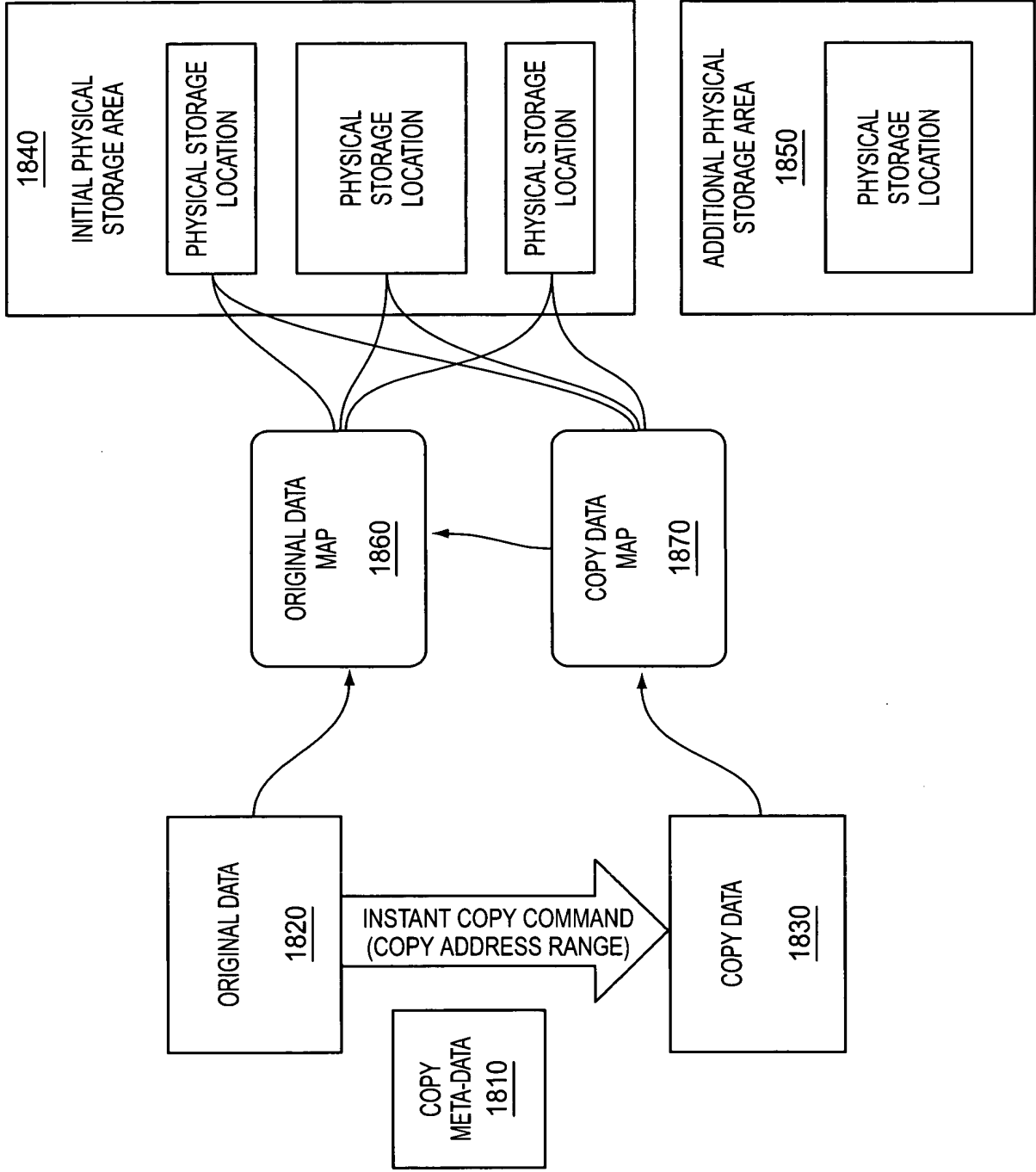


FIG. 18C

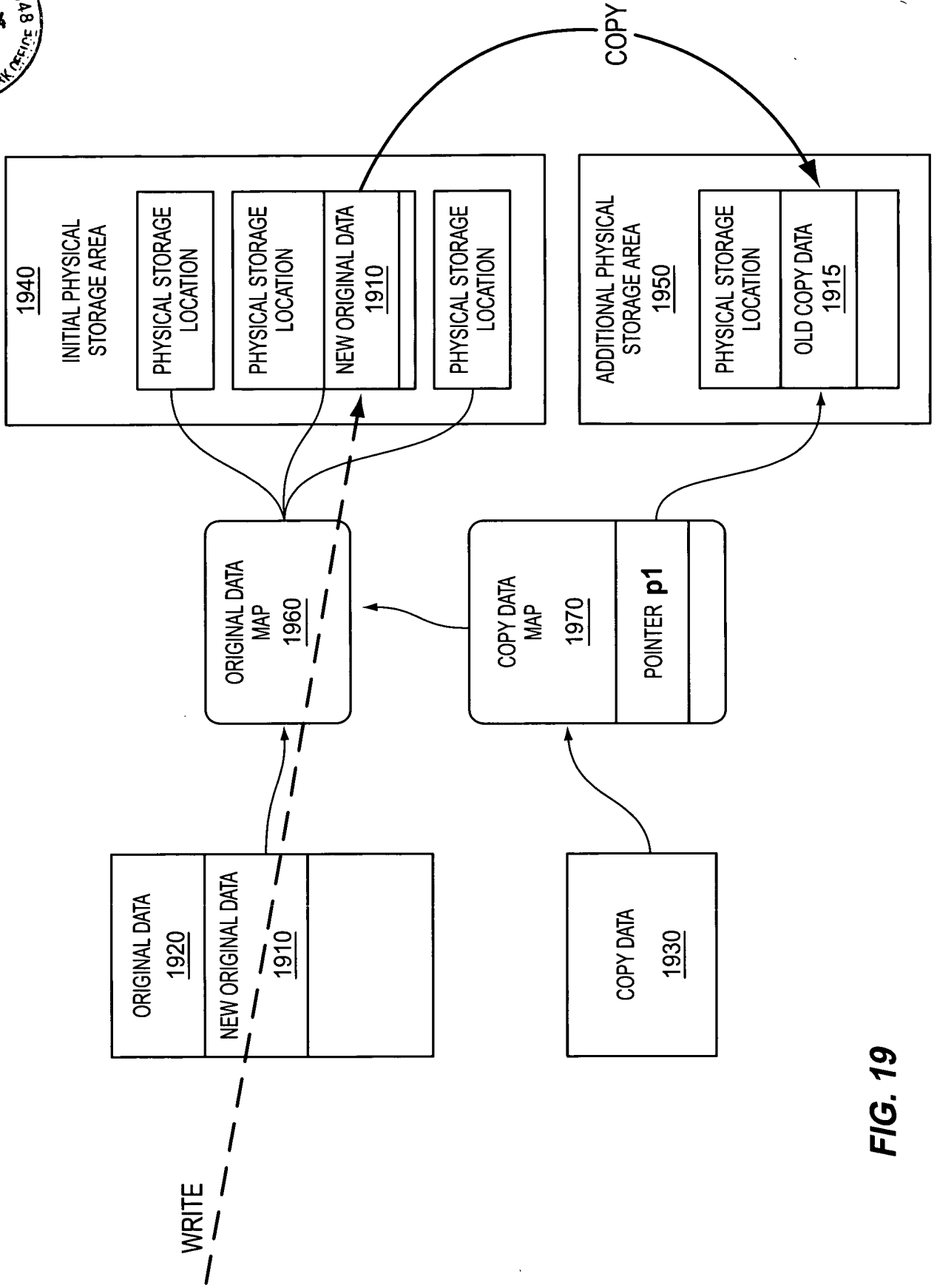


FIG. 19

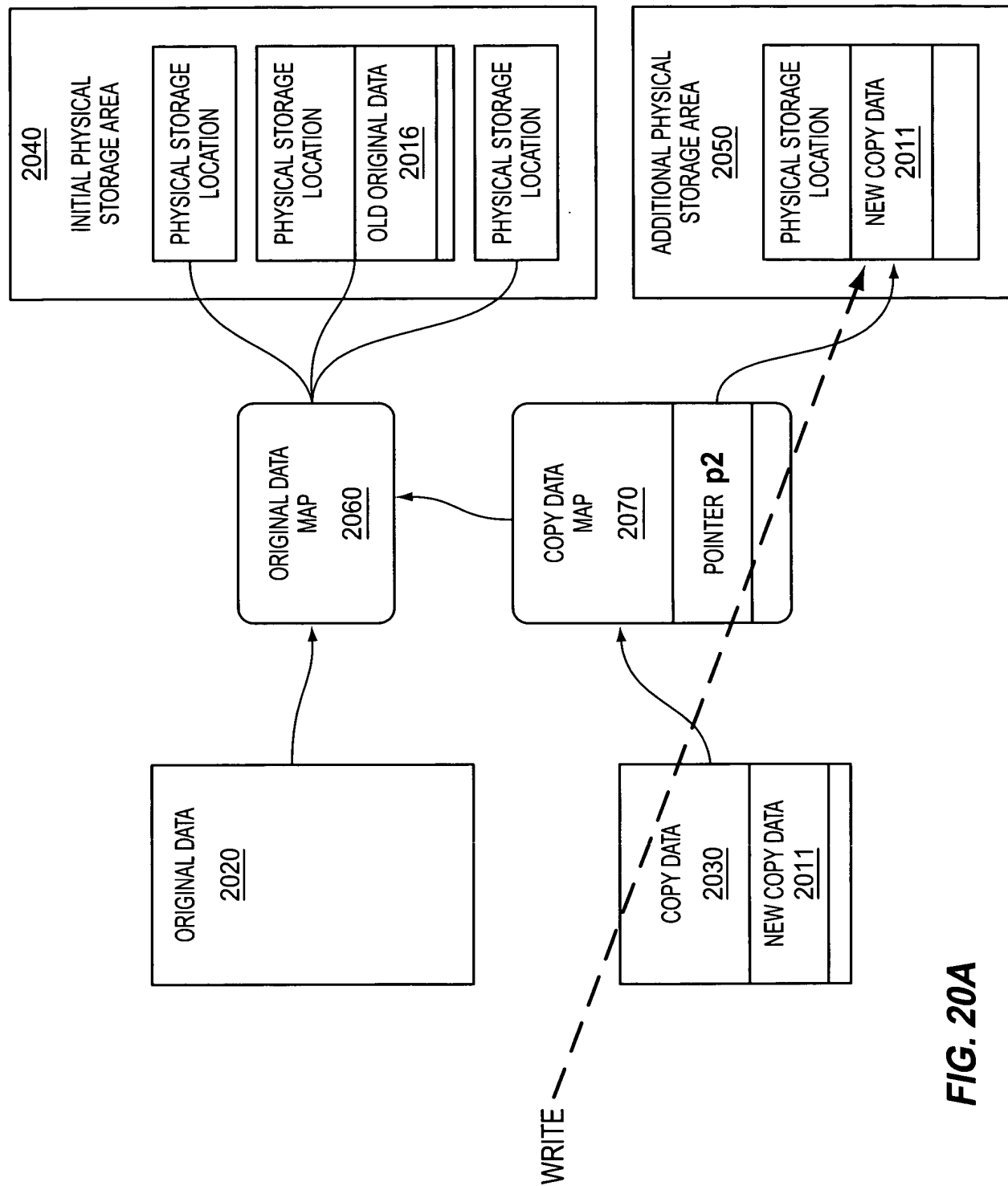


FIG. 20A

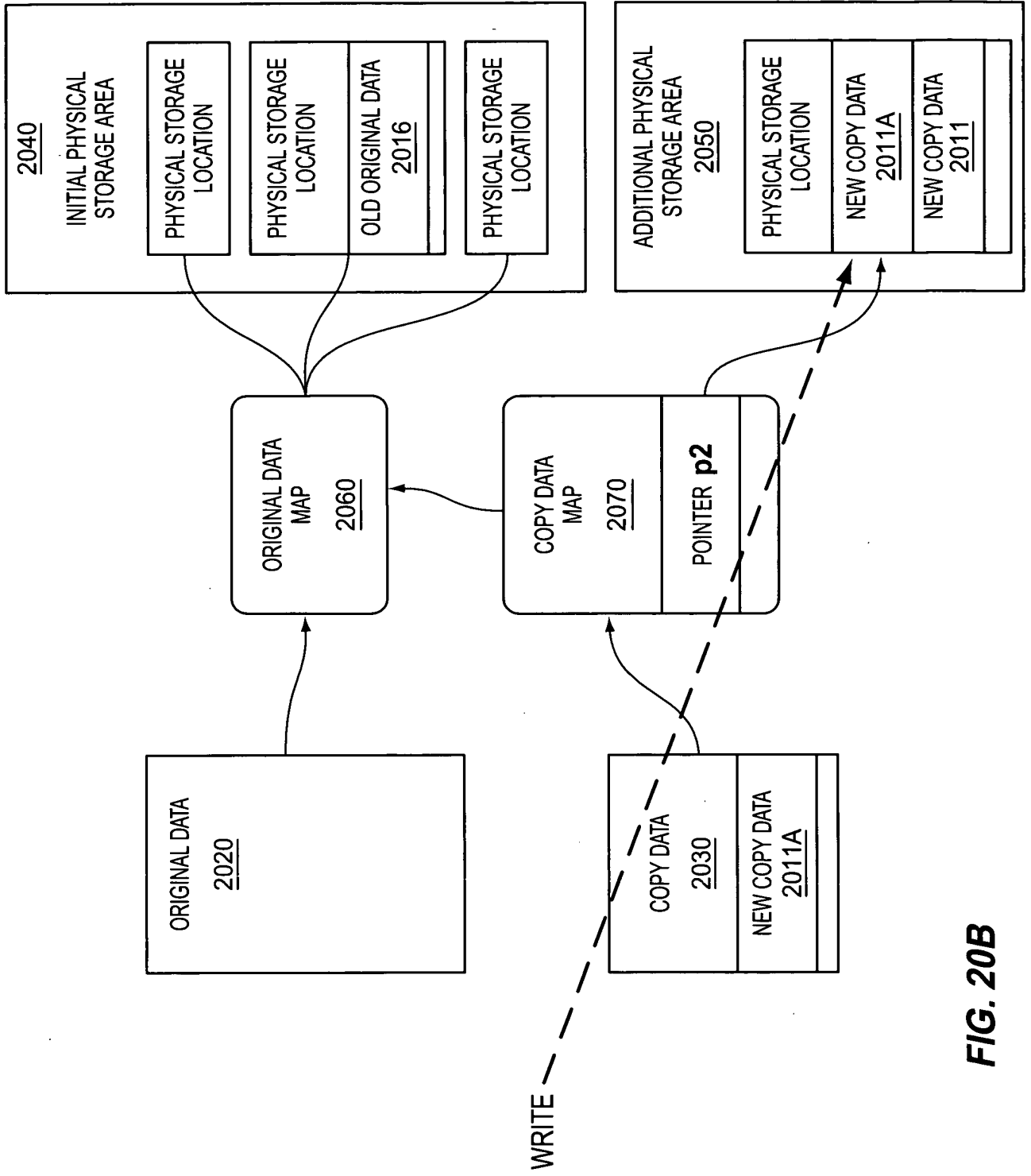


FIG. 20B

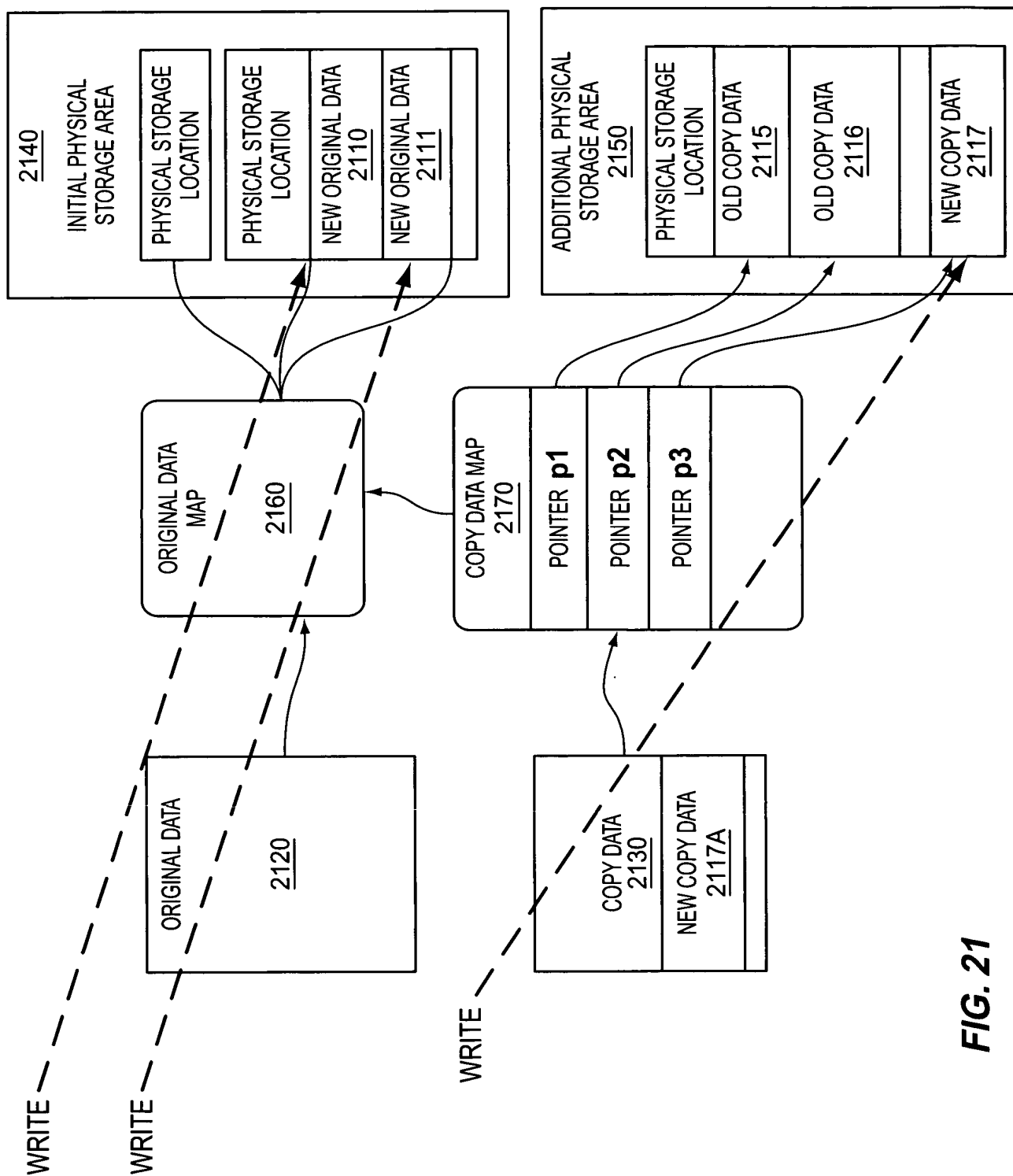


FIG. 21

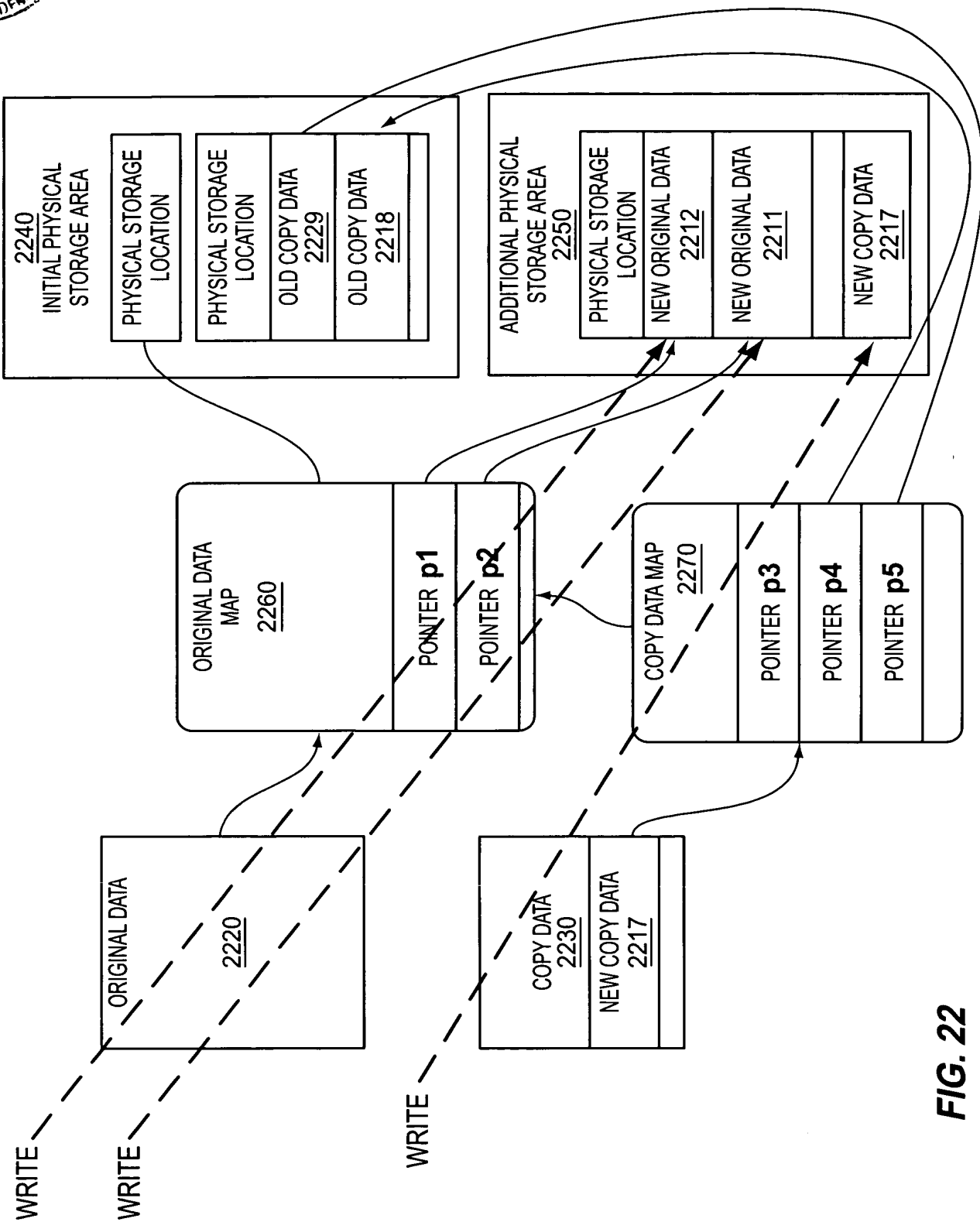


FIG. 22

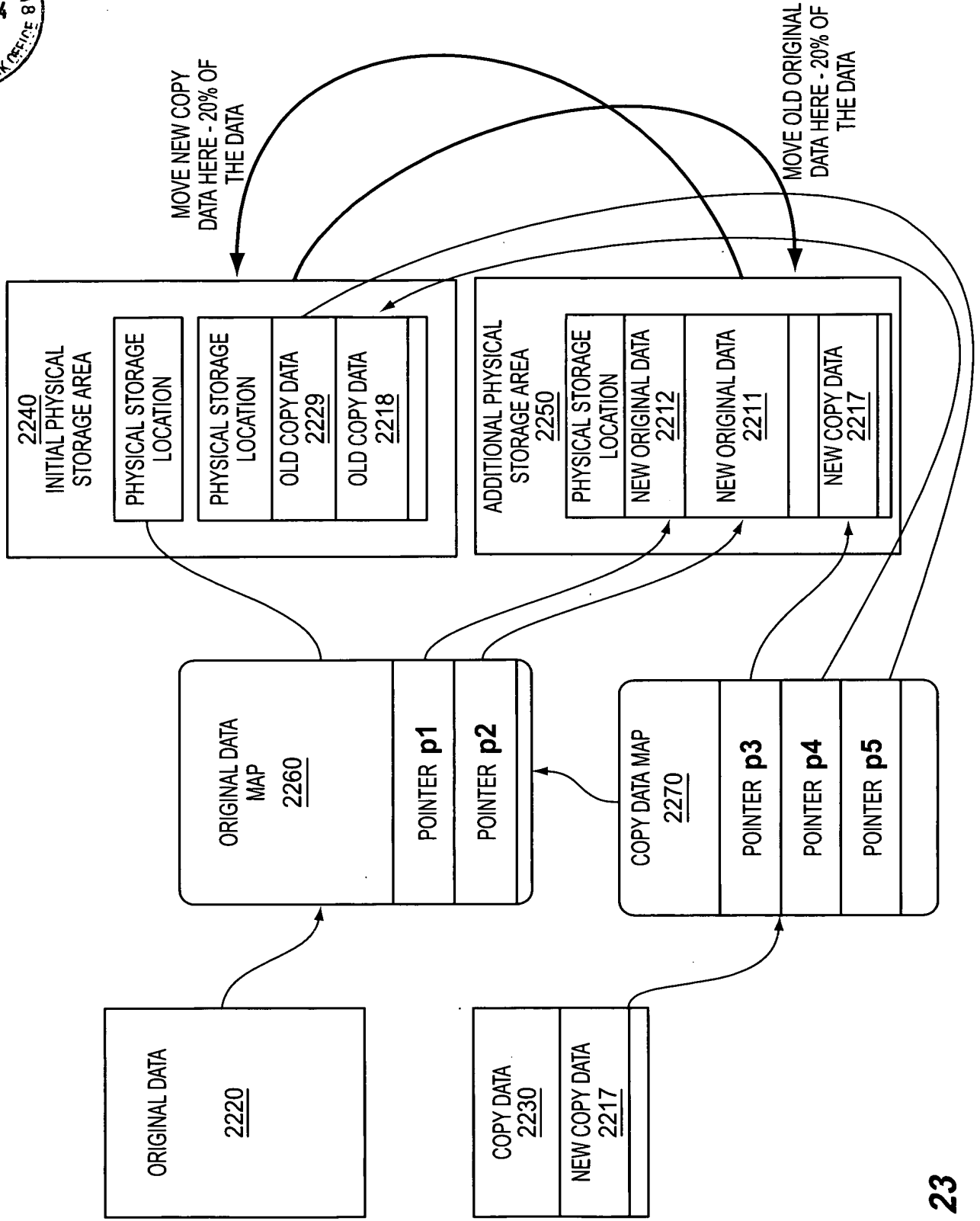


FIG. 23

FIG. 24A

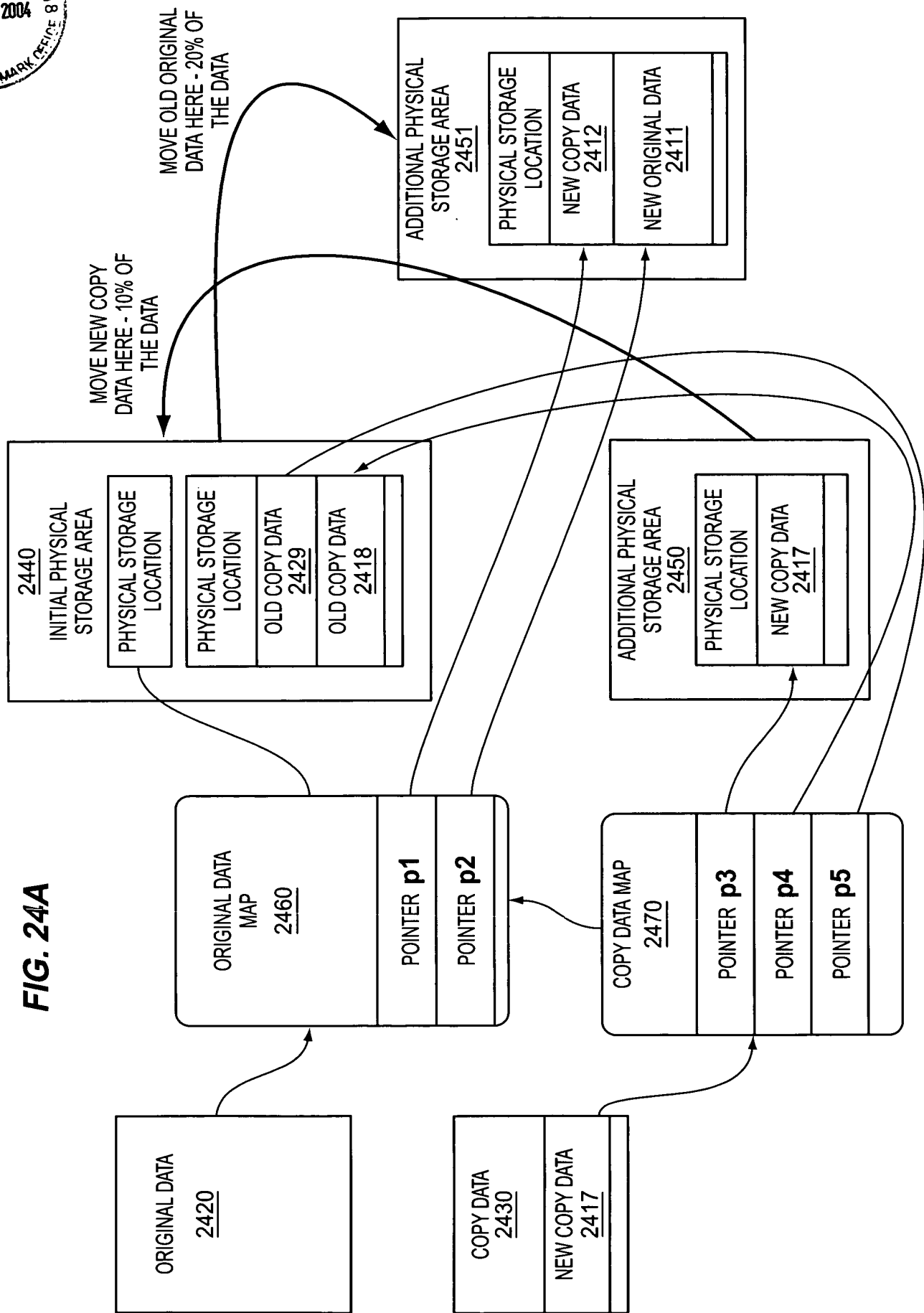


FIG. 24B

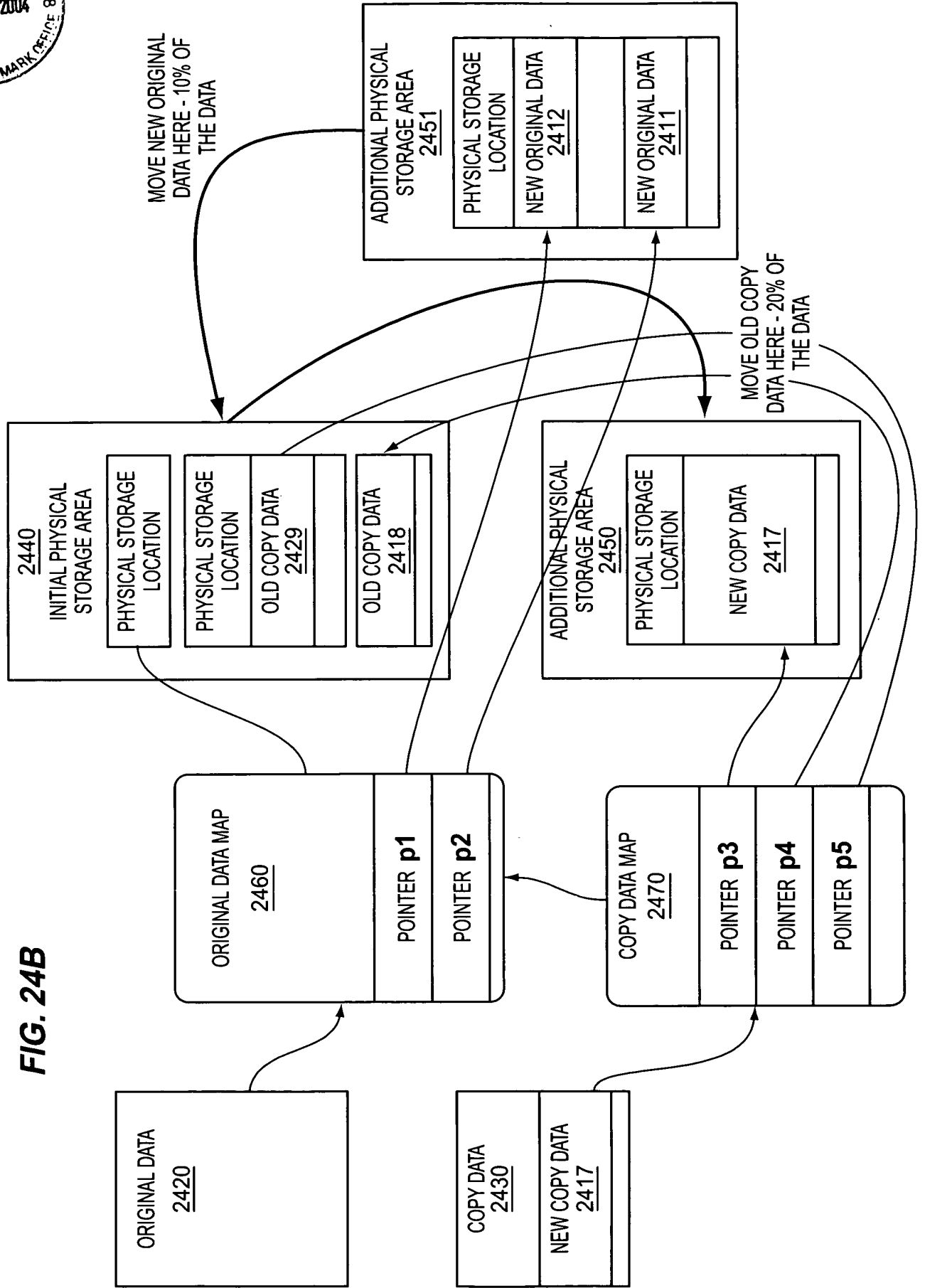
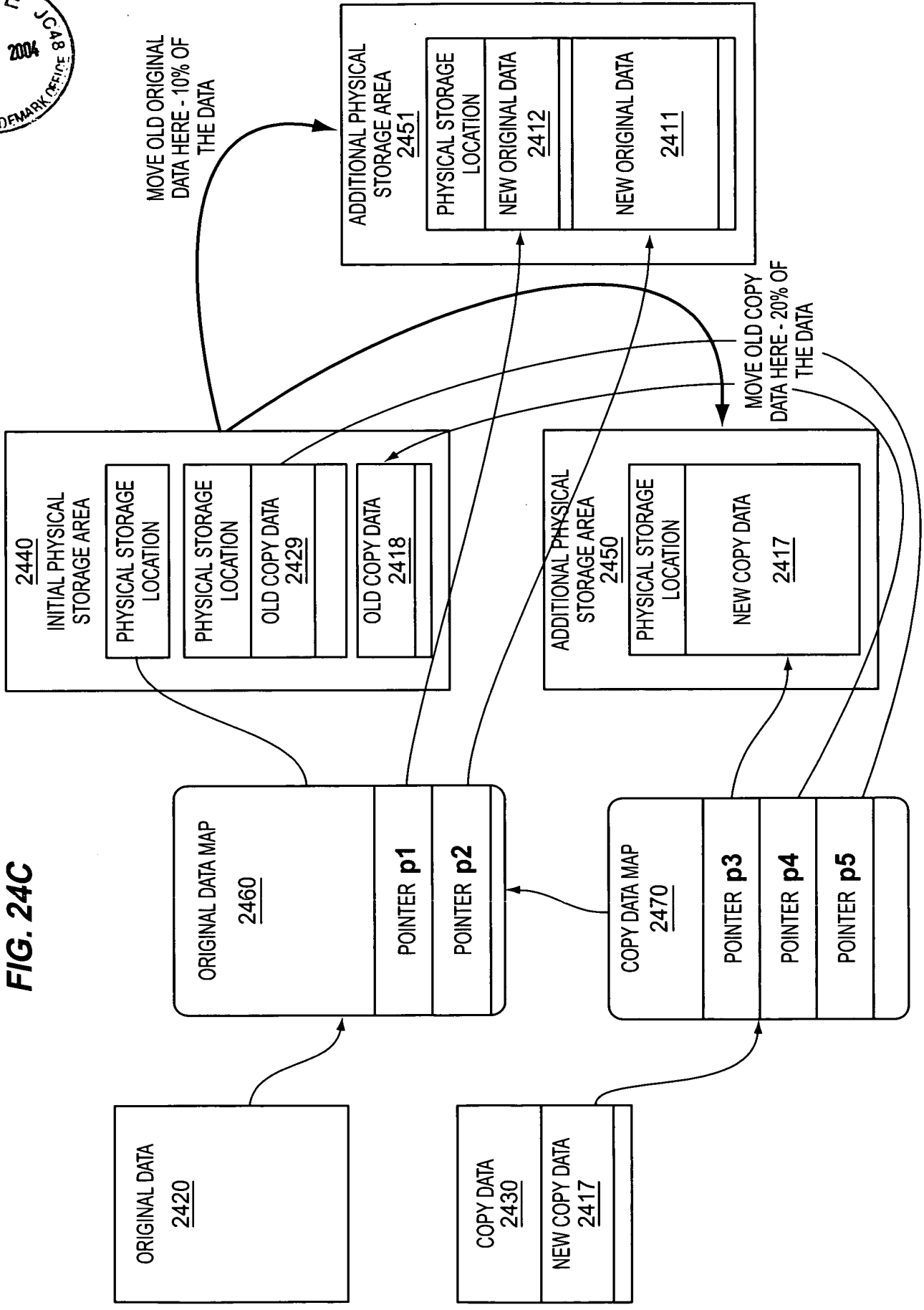




FIG. 24C



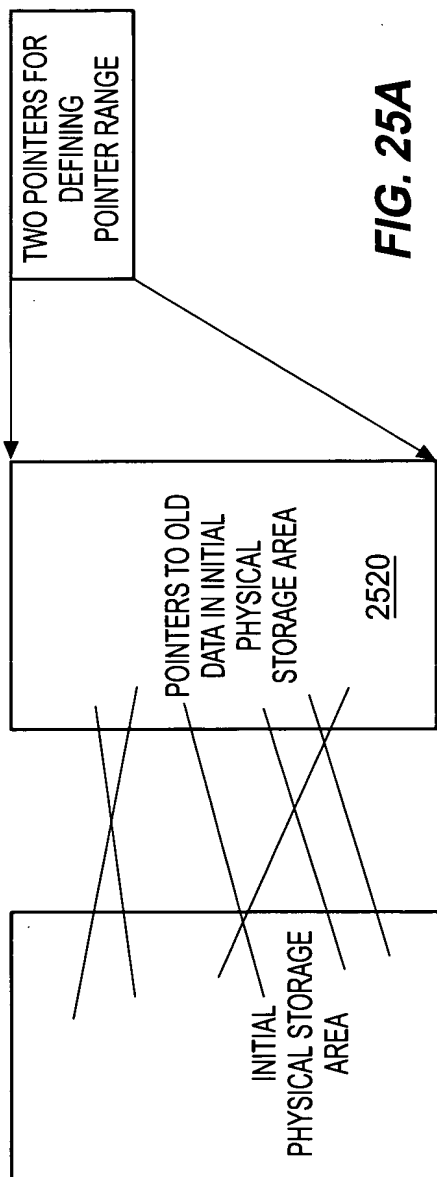


FIG. 25A

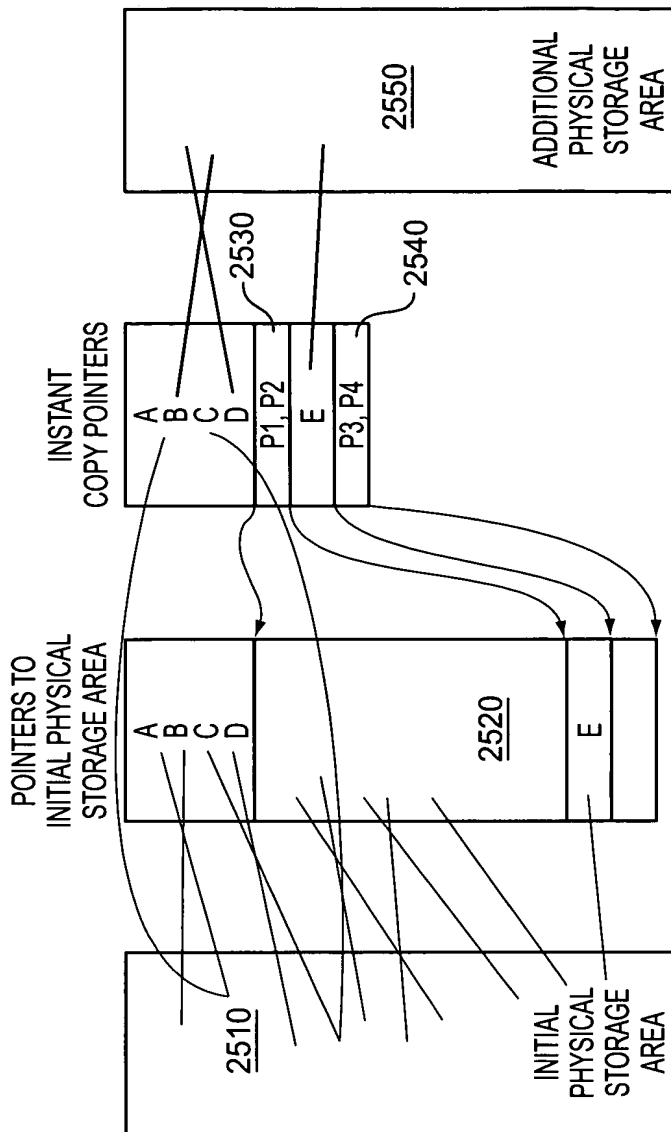


FIG. 25B